

**IN THE CLAIMS:**

Please amend the claims to read as follows. The following is a listing of all cancelled and pending claims, and cancels any prior listing in this application.

1. (Original) A system, comprising:  
  
an automated interactive acquirer of data comprehensively descriptive of a particular system;  
  
a data processor; and  
  
a reporter to report the conclusions of the data processor,  
  
**wherein the system described is the comprehensive medical state of a human being.**
  
2. (Currently amended) The system of claim 1, wherein the ~~system described is the comprehensive medical state of a human being~~ **automated interactive inquirer obtains the data by dynamically posing a plurality of questions to a user.**
  
3. (Original) The system of claim 2 1, where the data processor implements a clustering generation algorithm.
  
4. (Original) The system of claim 3, where the cluster generation algorithm finds a cluster of other human beings medically similar to the human being.

5. (Original) The system of claim 4, where the data processor operates on the generated cluster to generate useful medical information for the human being.

6. (Original) The system of claim 4, where the data processor implements an algorithm that measures medical similarity.

7. (Currently amended) A method, comprising:

~~comprehensively~~ describing a system human being's comprehensive medical state in terms of a basis set of fundamental attributes ~~of the system~~;

storing a representation of said description in a database;

measuring the distance between the state so described and all other ~~systems~~ states similarly described in a database of such systems;

identifying the cluster of closest other ~~systems~~ states within the database; and

analyzing the cluster of closest other ~~systems~~ states for information useful to improving the ~~system's attributes~~ human being's medical condition,

wherein at least one of the describing, storing, measuring or identifying is performed by, or with the assistance of, a computer system.

8. canceled.

9. (Currently amended) The method of claim ~~8~~ 7, where the number of other ~~systems~~ states in the cluster is set dynamically.

10. (Currently amended) The method of claim 9, where the number of other ~~systems~~ states in the cluster is determined by means of comparing the moving average of the incremental increases in the medical distance with each added other ~~systems~~ states to a threshold.

11. (Original) The method of claim 10, where the analysis of the cluster results in useful medical information for the human being.

12. (Currently amended) The method of claim 11, where the distance between the ~~systems~~ states in the database is a measure of medical similarity.

13. (Currently amended) A method of expressing a human being's comprehensive medical state as a multidimensional vector in a hyperspace, comprising:

articulating a comprehensive description of the human being's medical state using a specialized taxonomy; and

mapping the articulation to a vector in hyperspace whose components are numbers indicating (1) a measure of the presence or (2) the absence of each of a set of medical attributes,

wherein at least one of said articulating and mapping is performed by, or with the assistance of, a computer system.

14. (Original) The method of claim 13, where the numbers vary between zero and an integer upper bound.

15. (Currently amended) A method, comprising:

encoding a comprehensive description of a human's medical state ~~to~~ as a set of numerical values, wherein said encoding is implemented by, or with the assistance of, a computer program in response to data supplied by a user interacting with a computer program.

16. (Original) The method of claim 15 where each of the numerical values represent a measure of the presence or the absence of a unit vector in N dimensional space.

17. (Original) The method of claim 16, where N equals three.

18. (Original) The method of claim 17, where each three dimensional unit vector is a unique coincidence of: a bodily system identifier; an identifier of a medical condition or pertinent fact; and a identifier of anatomical location.